**Organelle Structure and Function Chart (key)**

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| **Organelle** | **Description of Structure** | **Organelle Function** |
| Cell Membrane | Thin, double layered, made of fat and protein, | Selects which molecules enter or leave the cell |
| Nucleus | Large, dense, oval or ball shaped | Controls all of the cell’s functions |
| Lysosome | Small, round | Digests food particles, wastes and anything that has invaded the cell. |
| Ribosome | Small specks, | Makes proteins according to the directions given by the DNA |
| Endoplasmic Reticulum | Clear tube system | Produces lipids (fats), breaks down drugs and other substances, packages proteins for delivery out of the cell. |
| Golgi Complex | Small bags connected by tubes | Packages up and transports materials out of the cell. |
| Mitochondria | Bean shaped with inner membranes. | Site of cellular respiration, breaks down glucose (food) into useable energy called ATP. |
| Chloroplast | Green, oval | Traps energy from sunlight, site of PS |
| Vacuole | Fluid filled sacs. | Stores food, water & sometimes wastes. |
| Cell Wall | Rigid, strong, stiff, made of cellulose. | Protects and gives the plant cell its shape |
| Cytoplasm | Clear, thick, jelly like | Suspends the cells’ organelles and is the site of many biochemical reactions. |